

## Stellwagen Sanctuary Program Profile: Monitoring

December 2014



Pomarine jaeger (lower left), a pirate and predator, harasses razorbills during the 2014 Stellwagen Christmas Bird Count.  
Photo by Peter Flood

## Stellwagen Christmas Bird Count surveys sanctuary's winter birds

On December 16, 2014, a dozen dedicated birders made their way into Stellwagen Bank National Marine Sanctuary on board the Research Vessel (R/V) *Auk* for the combined 2014 Christmas Bird Count (CBC) and winter sanctuary seabird survey. This was the 27<sup>th</sup> Stellwagen CBC and it offered the “best conditions ever” according to Simon Perkins, the ornithologist/naturalist who founded the Stellwagen count and has led every trip. With overcast skies (no glare), calm winds from the south (0-8 mph), a flat sea surface (often glassy at times) and swells of under two feet, the R/V *Auk* made good time traversing the bank.

Christmas Bird Counts have been administered by the National Audubon Society for 115 years. [Interesting fact: the first CBC was held on Christmas Day 1900 and was proposed as a new holiday tradition involving counting birds rather than hunting them.] Audubon reports that more than 2,200 CBCs are conducted each year throughout North America and involve thousands of volunteers.

The society notes on its web page that “Each of the citizen scientists who annually braves snow, wind, or rain, to take part in the Christmas Bird Count makes an enormous contribution to conservation. Audubon and other organizations use data collected in this longest-running wildlife census to assess the health of bird populations – and to help guide conservation action.”

Each year, all counts must be conducted from December 14 through January 5, and most take place on the same date every year. However, because the Stellwagen count requires favorable sea conditions, the R/V *Auk* is put on stand-by for the first available good-weather day, which this year happened to fall very early in the CBC period.

Most CBCs use a circle with a 15-mile diameter as the survey area, with participants counting every individual bird they see or hear that day. In the early years of the Stellwagen count, local volunteer birders chartered a vessel for a day-long trip to a count circle at the southern end of Stellwagen Bank (the first few counts were done before Stellwagen Bank National Marine Sanctuary was designated). The original circle encompassed the northernmost tip of Cape Cod, which allowed for land-based results even if the boat trip had to be cancelled due to inclement weather.

In 1999, the sanctuary became a partner in the count and a few years later the R/V *Auk* became the observation vessel (with a more flexible schedule). Starting in 2009, Perkins and sanctuary researchers changed the count area, and instead of using a circle, adopted standardized, linear track lines that “mowed the lawn” (eight parallel E-W transects laid out at 2.5-nautical-mile intervals, ranging over the full length of Stellwagen Bank). The 63-nautical-mile track was based on previous resource

## Stellwagen CBC 2014 Results

Canada Goose	8
Common Eider	78
Surf Scoter	4
White-winged Scoter	1
Long-tailed Duck	1
Red-throated Loon	3
Common Loon	3
Red-necked Grebe	1
Northern Fulmar	2
Great Shearwater	62
Northern Gannet	134
Pomarine Jaeger	16
unidentified jaeger	6
Dovekie	25
Common Murre	70
Razorbill	134
unidentified large alcid	72
Atlantic Puffin	13
Black-legged Kittiwake	95
Herring Gull	106
Iceland Gull	1
Great Black-backed Gull	31
unidenitified gull	70

**TOTAL BIRDS COUNTED: 935**



Photos (top to bottom): Great shearwater takes off as Stellwagen Christmas Bird Count team approaches; Atlantic puffin paddles in calm seas (one of 13 viewed – a Stellwagen CBC record number); 95 black-legged kittiwakes, like this one, were counted on Dec. 16, 2014; an ungainly-looking dovekie manages to maneuver away from the vessel. All photos by Peter Flood.

surveys done in the sanctuary and provides for repeatability and better year-to-year comparison of data.

Stellwagen Sanctuary Seabird Stewards (S4) used the CBC cruise for their winter season survey, collecting additional data before, during and after the CBC transects. S4 sightings also included Bonaparte's gulls, ring-billed gulls and black scoters. S4 is a new program organized by the sanctuary in cooperation with Mass Audubon. Other marine animals identified during the trip were humpback whales, a fin whale, a minke whale, harbor porpoises, harbor seals and gray seals.

Most noteworthy this year was the exceptionally large number of great shearwaters, a species of seabird that is rarely seen in our waters this time of year since its typical migration takes it to oceanic islands in the South Atlantic where it breeds during the austral summer. The total of 62 sightings far exceeded the previous North American CBC high count of 10. Many, if not all, of these lingering shearwaters may have been immature birds that were still too young to breed and instead chose to delay their migration to take advantage of the bank's abundance of fish. Other count highlights included unusually large numbers of pomarine jaegers, common murres and Atlantic puffins. The growing puffin numbers can be attributed to recent conservation efforts on the birds' nesting islands in Atlantic Canada and the Gulf of Maine.

Thanks to the record-numbers of birds, the whales and the glassy-calm seas, which allowed for spectacular views of the wildlife, participants ranked this year's Stellwagen Bank CBC as one of the best.

